Bruhat Bangalore Mahanagara Palike
Excecutive Engineer Yelahanka Division

Name of Work: Improvements to roads and drains at Someshwara nagara in ward No. 04

					Estimate Cost Rs.			150.00 Lakhs
Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
Providing & Refixing Stone Slabs of drains and Pointing in C.M(1:3). (Page No 25., I.No.5.33 of KPWD 2016-17)								
	76.00							
HCIC	8.36							
	84.36							
	5.06							
	89.42							
road	2	303.00	1.00		606.00			
-1, upto temple	2	400.00	1.00		800.00			
main road	2	160.00	1.00		320.00			
rd, 2nd cross rd	2	110.00	1.00		220.00			
cross rd	2	28.00	1.00		56.00			
cross rd L shape	2	222.00	1.00		444.00			
main	2	156.00	1.00		312.00			
cross	2	60.00	1.00		120.00			
cross	2	185.00	1.00		370.00			
cross	2	165.00	1.00		330.00			
cross	2	112.00	1.00		224.00			
main	2	177.00	1.00		354.00			
road	2	182.00	1.00		364.00			
main CBS	2	150.00	1.00		300.00			
cross CBS	2	100.00	1.00		200.00			
road CBS	2	140.00	1.00		280.00			
Road	2	92.00	1.00		184.00			
slab								
road	2	303.00	1.65		999.90			
-1, upto temple	2	400.00	1.65		1320.00			
main road	2	160.00	1.65		528.00			
rd, 2nd cross rd	2	110.00	1.65		363.00			
cross rd	2	28.00	1.65		92.40			
cross rd L shape	2	222.00	1.65		732.60			
main	2	156.00	1.65		514.80			
cross	2	60.00	1.65		198.00			
cross	2	185.00	1.65		610.50			
cross	2	165.00	1.65		544.50			
cross	2	112.00	1.65		369.60			
main	2	177.00	1.65		584.10			
road	2	182.00	1.65		600.60			
Total Qty					**12942.00**			
Consider 30% of total Qty					**3882.60**			
					3882.60	**Sqm**	**89.42**	**347188.30**

Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
precast slab of 100 mm thick including cost of all materials, labour, transportation,loading ,unloading,etc.,complete as per the direction of engineer in charge- Data								
	2100.00							
Total qty of Item no - precast slab					324.80			
					324.80	**Sqm**	**2100.00**	**682080.00**
granite slabs of selected quality roughly dressed and fixed in cement mortar (1:6) including etc., complete. 7.5cm thick (Page No 25., I.No.5.31.1 of KPWD S.R 2016-17).								
	628.00							
	69.08							
	697.08							
	41.82							
	738.90							
15% of Total qty of					1941.30			
					1941.30	**Sqm**	**738.90**	**1434435.89**
-1. Earthwork excavation by manual means in ordinary soil involving an average horizontal upto 2 meters and an average lift upto 1.5 m, excavated surface leveled and sides neatly the disposed earth to be leveled neatly after breaking of clods complete as per specifications. Chapter 3 (Page No142., I.No.19.1 of KPWD S.R 2016-17).								
	82.00							
	9.02							
	91.02							
	5.46							
	96.48							
lt, transport	100.00							
	196.48							
road	2	303.00	0.55	0.50	166.65			
-1, upto temple	2	400.00	0.55	0.50	220.00			
road	2	160.00	0.55	0.50	88.00			
nt, 2nd cross rd	2	110.00	0.55	0.50	60.50			
rd	2	28.00	0.55	0.50	15.40			
rd L shape	2	222.00	0.55	0.50	122.10			
	2	156.00	0.55	0.50	85.80			
	2	60.00	0.55	0.45	29.70			
	2	185.00	0.50	0.45	83.25			
	2	165.00	0.50	0.45	74.25			
	2	112.00	0.50	0.45	50.40			
	2	177.00	0.50	0.45	79.65			
road	2	182.00	0.55	0.45	90.09			
portion								
road	1	303.00	1.00	0.40	121.20			
-1, upto temple	1	400.00	1.00	0.40	160.00			
road	1	160.00	1.00	0.40	64.00			
nt, 2nd cross rd	1	110.00	1.00	0.40	44.00			
rd	1	28.00	1.00	0.40	11.20			
rd L shape	1	222.00	1.00	0.40	88.80			
	1	156.00	1.00	0.40	62.40			

Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
cross	1	60.00	1.00	0.40	24.00			
cross	1	185.00	1.00	0.40	74.00			
cross	1	165.00	1.00	0.40	66.00			
cross	1	112.00	1.00	0.40	44.80			
main	1	177.00	1.00	0.40	70.80			
road	1	182.00	1.00	0.40	72.80			
niches	15	12.00	5.50	0.40	396.00			
	5	8.00	1.50	1.20	72.00			
					2537.79	**Cum**	**196.48**	**498628.02**
4-1.2: Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ kgs. with 40mm and down size graded granite metal coarse aggregates @ 0.892cum and fine aggregates @ 0.465cum machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications.Specification No.KBS 4.1, 4.2 (P.12/I.4.2)/ PWD SR 2016-17								
rate	5046.00							
AD-HOC	555.06							
Total-1	5601.06							
	336.06							
Total-2	5937.12							
	5	8.00	1.50	0.15	9.00			
					9.00	**Cum**	**5937.12**	**53,434.11**
5.1.13-3 : Providing and constructing granite / trap / basalt size stone masonry in basement with cement mortar 1:6, edges of stones chistle dressed in courses not less than 15 cms high, bond stones every m. apart in each course including cost of materials, labour, curing complete as per specifications. KBS 5.1.13 (P.23/I.5.9)/ PWD SR 2016-17								
rate	5005.00							
AD-HOC	550.55							
Total-1	5555.55							
	333.33							
Total-2	5888.88							
	10	8.00	0.45	0.70	25.20			
					25.20	**Cum**	**5888.88**	**148399.85**
4-1.6: Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ kgs. with 20mm and down size graded granite metal coarse aggregates at 0.78cum and fine aggregates at 0.459 cum, machine mixed, concrete laid in layers not exceeding 15 cms.thick, well compacted, in foundation, plinth and cills including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1,4.2. (P.No.12, I.No.4.6 of PW, P&IWTD 2015-17)								
rate	5441.00							
AD-HOC	598.51							
Total-1	6039.51							
	362.37							
Total-2	6401.88							
	10	8.00	0.45	0.10	3.60			
					3.60	**Cum**	**6401.88**	**23,046.77**
providing precast slab of 250 mm thick including cost of all materials, labour, carriage,transportation,loading ,unloading,etc.,complete as per the direction of engineer in charge-(Granite)								
rate	5111.00							

Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
	7	8.00	1.50		84.00			
					84.00	**Sqm**	**5111.00**	**429324.00**
400-6.1. Construction of granular sub-base by providing close graded material, crushed stone aggregates of granite/trap/basalt material, mixing in a mechaical mix plant at OMC, carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications. Plant Mix Method.Close graded granular sub-base material as per 400-1 For Grading- II Material (SSR 2015., I.No.20.4.2 of KPWD S.R 2016-17).								
	1571.00							
HOC	172.81							
	1743.81							
	104.63							
	1848.44							
portion								
	1	303.00	1.00	0.15	45.45			
- 1, upto temple	1	400.00	1.00	0.15	60.00			
road	1	160.00	1.00	0.15	24.00			
nd, 2nd cross rd	1	110.00	1.00	0.15	16.50			
cross rd	1	28.00	1.00	0.15	4.20			
cross rd L shape	1	222.00	1.00	0.15	33.30			
main	1	156.00	1.00	0.15	23.40			
cross	1	60.00	1.00	0.15	9.00			
cross	1	185.00	1.00	0.15	27.75			
cross	1	165.00	1.00	0.15	24.75			
cross	1	112.00	1.00	0.15	16.80			
main	1	177.00	1.00	0.15	26.55			
road	1	182.00	1.00	0.15	27.30			
inches	15	12.00	5.50	0.15	148.50			
					487.50	**Cum**	**1848.44**	**901113.82**
400- Wet Mix Macadam - KSRRB M400-17. Providing, laying, spreading and compacting graded stones aggregate to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406 (SSR LNo.20.18)								
	1668.00							
HOC	183.48							
	1851.48							
	111.09							
	1962.57							
portion								
road	1	303.00	1.00	0.225	68.18			
- 1, upto temple	1	400.00	1.00	0.225	90.00			
main road	1	160.00	1.00	0.225	36.00			
nd, 2nd cross rd	1	110.00	1.00	0.225	24.75			
cross rd	1	28.00	1.00	0.225	6.30			
cross rd L shape	1	222.00	1.00	0.225	49.95			
main	1	156.00	1.00	0.225	35.10			
cross	1	60.00	1.00	0.225	13.50			
cross	1	185.00	1.00	0.225	41.63			

Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
cross	1	165.00	1.00	0.225	37.13			
cross	1	112.00	1.00	0.225	25.20			
main	1	177.00	1.00	0.225	39.83			
road	1	182.00	1.00	0.225	40.95			
reaches	15	12.00	5.50	0.225	222.75			
					731.25	Cum	1962.57	1435128.44
ding and applying primer coat with ss bitumen emulsion on prepared surface of granular base as WMM including clearing of road surface and spraying primer at the rate of 0.60 kg/sqm using anical means complete as per specifications. MORTH Specification No.502 (P.No.160/It No.21.6)								
rate	26.00							
AD-HOC	2.86							
Total-1	28.86							
WM	1.73							
Total-2	30.59							
Cut portion								
road	1	303.00	1.00		303.00			
rd - 1, upto temple	1	400.00	1.00		400.00			
main road	1	160.00	1.00		160.00			
rd, 2nd cross rd	1	110.00	1.00		110.00			
cross rd	1	28.00	1.00		28.00			
cross rd L shape	1	222.00	1.00		222.00			
main	1	156.00	1.00		156.00			
cross	1	60.00	1.00		60.00			
cross	1	185.00	1.00		185.00			
cross	1	165.00	1.00		165.00			
cross	1	112.00	1.00		112.00			
main	1	177.00	1.00		177.00			
road	1	182.00	1.00		182.00			
reaches	15	12.00	5.50		990.00			
correction								
road	1	303.00	2.40		727.20			
rd - 1, upto temple	1	400.00	2.10		840.00			
main road	1	160.00	2.00		320.00			
rd, 2nd cross rd	1	110.00	3.00		330.00			
cross rd	1	28.00	3.00		84.00			
cross rd L shape	1	222.00	3.00		666.00			
main	1	156.00	2.70		421.20			
cross	1	60.00	2.50		150.00			
cross	1	185.00	2.00		370.00			
cross	1	165.00	1.80		297.00			
cross	1	112.00	2.30		257.60			
main	1	177.00	2.10		371.70			
road	1	182.00	2.30		418.60			
					8503.30	Sqm	30.59	260129.55

Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
MORTH 500- 15. Providing, laying dense graded bituminous macadam using 40/60 TPH capacity with Mechanical paver Gr-II (50mm to 75mm), crushed aggregates of specified grading mixed with 4.5% VG 30 grade bituminous binder and , transporting the hot mix to work site , laying to required level and grade, rolling with smooth wheeled, vibratory and tandem rollers to achieve required compaction as per MORTH table 500-10 complete in all respects complete as per specifications MORTH Specification No.507 (P.No.162&163 It.No.21.17.6)								
Entrance	6717.00							
ROAD+HOC	738.87							
Subtotal-1	7455.87							
Waste	447.35							
Subtotal-2	7903.22							
Cut portion								
Main road	1	303.00	1.00	0.05	15.15			
Road-1, upto temple	1	400.00	1.00	0.05	20.00			
Temple road	1	160.00	1.00	0.05	8.00			
Temple rd, 2nd cross rd	1	110.00	1.00	0.05	5.50			
2nd cross rd	1	28.00	1.00	0.05	1.40			
2nd cross rd L shape	1	222.00	1.00	0.05	11.10			
3rd main	1	156.00	1.00	0.05	7.80			
3rd cross	1	60.00	1.00	0.05	3.00			
4th cross	1	185.00	1.00	0.05	9.25			
5th cross	1	165.00	1.00	0.05	8.25			
6th cross	1	112.00	1.00	0.05	5.60			
6th main	1	177.00	1.00	0.05	8.85			
Main road	1	182.00	1.00	0.05	9.10			
Trenches	15	12.00	5.50	0.05	49.50			
Filling correction								
Main road	1	303.00	2.40	0.05	36.36			
Road-1, upto temple	1	400.00	2.10	0.05	42.00			
Temple road	1	160.00	2.00	0.05	16.00			
Temple rd, 2nd cross rd	1	110.00	2.00	0.05	11.00			
2nd cross rd	1	28.00	2.00	0.05	2.80			
2nd cross rd L shape	1	222.00	2.00	0.05	22.20			
3rd main	1	156.00	2.70	0.05	21.06			
3rd cross	1	60.00	2.50	0.05	7.50			
4th cross	1	185.00	2.00	0.05	18.50			
5th cross	1	165.00	1.80	0.05	14.85			
6th cross	1	112.00	2.30	0.05	12.88			
6th main	1	177.00	1.60	0.05	14.16			
Main road	1	182.00	2.30	0.05	20.93			
					402.74	Cum	7903.22	3182943.71
MORTH 500-2. Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with dust gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH specification clause (P.No.161 & I.No.21.2)								
Entrance	3.00							
ROAD+HOC	0.33							
Subtotal-1	3.33							
Waste	0.20							

Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
Total-2	3.53							
road	1	303.00	6.20		1878.60			
rd - 1, upto temple	1	400.00	5.20		2080.00			
main road	1	160.00	4.00		640.00			
rd, 2nd cross rd	1	110.00	5.60		616.00			
cross rd	1	28.00	6.00		168.00			
cross rd L shape	1	222.00	5.10		1132.20			
main	1	156.00	7.20		1123.20			
cross	1	60.00	5.80		348.00			
cross	1	185.00	6.10		1128.50			
cross	1	165.00	6.00		990.00			
cross	1	112.00	6.10		683.20			
main	1	177.00	6.40		1132.80			
road	1	182.00	4.00		728.00			
					12648.50	**Sqm**	**3.53**	**44,646.68**
500-7:Providing and applying tack coat with bitumen emulsion using 80/100 grade bitumen on the prepared black toped suface at 2.5kg per 10 sqm, heating bitumen in boiler fitted with set (Excluding cleaning of road surface) including cost of all materials, labour, HOM of neries complete as per Specifications.(P.No.160 & I.No.21.7)								
ate	11.00							
OC	1.21							
Total-1	12.21							
	0.73							
Total-2	12.94							
road	1	303.00	6.20		1878.60			
rd - 1, upto temple	1	400.00	5.20		2080.00			
main road	1	160.00	4.00		640.00			
rd, 2nd cross rd	1	110.00	5.60		616.00			
cross rd	1	28.00	6.00		168.00			
cross rd L shape	1	222.00	5.10		1132.20			
main	1	156.00	7.20		1123.20			
cross	1	60.00	5.80		348.00			
cross	1	185.00	6.10		1128.50			
cross	1	165.00	6.00		990.00			
cross	1	112.00	6.10		683.20			
main	1	177.00	6.40		1132.80			
road	1	182.00	4.00		728.00			
					12648.50	**Sqm**	**12.94**	**163704.48**
MS00- 15. Providing, laying bituminousConcrete using 40/60 THP capacity H.M.P with cial paver Gr-II (30mm to 45mm), crushed aggregates of specified grading premixed with 5.4% grade bituminous binder and , transporting the hot mix to work site , laying to the required grade,rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired ction as per MORTH Specification clause No.500.9 complete in all respects complete as per ations MORTH Specification No.509 (P.No.164 Item No.21.22.6)								
ate	7659.00							
OC	842.49							
Total-1	8501.49							
	510.09							
Total-2	9011.58							
road	1	303.00	6.20	0.04	75.14			
rd - 1, upto temple	1	400.00	5.20	0.04	83.20			

Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
road	1	160.00	4.00	0.04	25.60			
rd, 2nd cross rd	1	110.00	5.60	0.04	24.64			
rd	1	28.00	6.00	0.04	6.72			
rd L shape	1	222.00	5.10	0.04	45.29			
	1	156.00	7.20	0.04	44.93			
	1	60.00	5.80	0.04	13.92			
	1	185.00	6.10	0.04	45.14			
	1	165.00	6.00	0.04	39.60			
	1	112.00	6.10	0.04	27.33			
	1	177.00	6.40	0.04	45.31			
	1	182.00	4.00	0.04	29.12			
					505.94	**Cum**	**9011.58**	**4559318.48**
and fixing pre cast solid **cement concrete kerb stones** made out of CC 1:2:4 with top and width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 and finishing cutting including formwork, curing, including cost of materials, labour charges loading and unloading, lead and lift, transportation ete.,complete (P.No-25, I No-5.30)								
	313.00							
	34.43							
	347.43							
	20.85							
	368.28							
damaged	2	25.00			50.00			
				A	**50.00**			
				B	**111.00**	**Nos**	**368.28**	**40,878.61**
Painting two coats after filling the surface with synthetic enamel paint in approved new plastered concrete surfaces, with materials, labour complete as per specifications. Chapter 8 (P.No-183, I No-24.1)								
	60.00							
	6.60							
	66.60							
	4.00							
	70.60							
	2	150.00	0.35		105.00			
					105.00	**Sqm**	**70.60**	**7,412.58**
-13: Road marking with hot applied thermoplastic compound with reflect rising glass bituminous surface- providing and laying of hot applied thermoplastic compound 2.5 mm reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of level, uniform and free from streaks and holes complete as per specifications. MORTH No. 803, No. 1974 (P.No.185 & I.No.24.15)								
	512.00							
	56.32							
	568.32							
	34.10							
	602.42							
	2	303.00	0.10		60.60			
upto temple	2	400.00	0.10		80.00			
road	2	160.00	0.10		32.00			
rd, 2nd cross rd	2	110.00	0.10		22.00			
rd	2	28.00	0.10		5.60			

Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
cross rd L shape	2	222.00	0.10		44.40			
main	2	156.00	0.10		31.20			
cross	2	60.00	0.10		12.00			
cross	2	185.00	0.10		37.00			
cross	2	165.00	0.10		33.00			
cross	2	112.00	0.10		22.40			
main	2	177.00	0.10		35.40			
road	2	182.00	0.10		36.40			
					452.00	**Sqm**	**602.42**	**272293.48**
M800 Road markers / Road stud KSRRB M800-35. Providing and fixing of road stud 100x 100 diecast in aluminium, resistant to corrosive effect of salt and grit, fitted with lense reflectors, in concrete or asphaltic surface by drilling hole 30 mm upto a depth of 60 mm and bedded in suitable bituminous grout or epoxy mortar, all as per BS: 873 part 4:1973 complete as per specifications.(P.No-189,I No-24.41)								
rate	339.00							
HO-HOC	37.29							
Total-1	376.29							
	22.58							
Total-2	398.87							
		2200.00			4400.00			
00m interval					**733.33**	**Nos**	**398.87**	**292502.76**
							Total Construction Cost	**14776609.54**
							DPR & PMC Charges	**223300.00**
							Sub Total	**14999909.54**
							Utility Shifting, Miscellaneous, Rounding off	**90.46**
							GRAND TOTAL	**15000000.00**

rtificate

The workspot was inspected and works is found to be necessary.

The area comes within the Bruhat Bangalore Mahanagara Palike limits.

The rates adopted based on the PWD SR,Bangalore circle for year 2016-2017, issue rates and Data Rates.

Assistant Engineer

Asst. Executive Engineer,

Executive Engineer,
Yelahanka Division,
BBMP Bangalore
7/2/18

Administrative Approval

Accorded For ..180.00 lakhs
Head of A/C..P-2415
CER NO :639/17-18 Dt:.. 08/02/2018

E.E. (Project)

Technical Sanction

Accorded For ..180.00 lakhs
Head of A/C..P-2415
CER NO :642 Dt:.. 8/2/18

TA CE (YNK)